## MAPPING OF THE COUNTERMEASURES TO THE SAFEGUARDS

## Introduction.

The SAFEGUARDS are the general requirements which must be met in order to be compliant with the policy of the DCI for accreditation of a system. Each of the SAFEGUARDS may have one or more countermeasures associated with it by which an assessment of "goodness" of instantiation of the SAFEGUARD may be expressed. Further, the more general objectives for building systems - that is, process complexity reduction (PCR), quality engineering (QE), reference monitor (RM), and real time monitor (RTM), need to be assessed when applicable for a particular SAFEGUARD.

The following mapping of countermeasures and objectives with the DCI SAFEGUARDS provides a means for assessment of a system. In order to be assessed at the highest level of "goodness," each countermeasure associated with a particular required SAFEGUARD (for the mode of operation as defined by the DCI SAFEGUARDS) would have to be completely satisfied.

A copy of the DCI SAFEGUARDS for the multi-level security mode, and of the countermeasures and objectives is provided for reference.

The example document, which follows this mapping, provides an analysis and findings of the Personnel Security System, the Information Security System, and Hardware/ Software Security, using the countermeasures as described.

## Mapping.

SAFEGUARD	UARD COUNTERMEASURES		OBJECTIVES			
		PCR	QE	RM	RTM	
1	25,31,32,33,34,36,37,38	Χ	χ	χ	X	
2	35		Χ	X		
1 2 3 4 5 6 7 8	26, 27, 28, 29	Х	X			
4	25, 30, 31, 33, 34, 36, 37, 38	Х	Χ	Χ	Χ	
5	21, 22, 23, 24, 25		X	Χ	X	
6	22		X	X	X	
7	21		Χ	X	X	
8	18,19,20	Х	Χ	Χ	X	
9	9, 10 7, 10	Х	X	X		
10	7, 10	X	X		X	
11	6 7, 8	Χ	X			
12	7, 8	Χ	Χ	Χ	X	
13	3, 12	Χ	Χ			
14	1, 2	Χ	Χ			
15	4 5	Χ	Χ			
16	5	X	Χ			
17	13	Х	Χ			
18	14	Χ	Χ			
19	15	Χ	Χ			
20	16	Χ	Χ			
21	17	Х	Х			
22	ALL (?)	Χ	X	X	X X	
23	ALL (?)	Χ	X	Χ	Χ	
24	ALL (?)	Х	X			
25	ALL (?)	Χ	X			
26	12	Χ	Χ			
27	11	Χ	Х			
	7, 21	X	Χ			
29	7, 21, 22, 23, 24, 25, 30, 32	X	Χ	χ		

## Objectives key:

PCR Process Complexity Reduction QE Quality Engineering RM Reference Monitor

RTM Real Time Monitor

